

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number  
**WO 2005/058684 A1**

(51) International Patent Classification<sup>7</sup>: **B63B 25/14**,  
B63J 5/00, F17C 7/00

(21) International Application Number:  
PCT/FI2004/050009

(22) International Filing Date: 30 January 2004 (30.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
20031848 18 December 2003 (18.12.2003) FI

(71) Applicant (for all designated States except US): **WÄRT-  
SILÄ FINLAND OY** [FI/FI]; Tarhaajantie 2, FI-65380  
Vaasa (FI).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MAHLANEN, Timo**  
[FI/FI]; Prikitie 2 A, FI-00850 Helsinki (FI).

(74) Agent: **AWEK INDUSTRIAL PATENTS LTD OY**;  
P.O.Box 230, FI-00101 Helsinki (FI).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

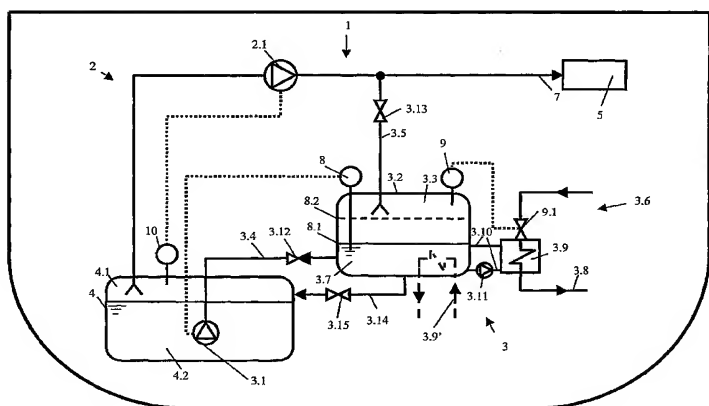
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,  
GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: GAS SUPPLY ARRANGEMENT OF A MARINE VESSEL AND METHOD OF CONTROLLING GAS PRESSURE  
IN A GAS SUPPLY ARRANGEMENT OF A MARINE VESSEL



(57) Abstract: Gas supply arrangement (1) for a marine vessel (6) being adapted to carry liquefied gas in its cargo tank (4) having an ullage space section (4.1) and a liquid phase section (4.2), and to utilise the cargo as fuel to provide power for the vessel, the arrangement comprising a first gas supply line (2) which connects an ullage space section (4.1) of the cargo tank (4) and a gas main supply line (7) and which is provided with a compressor (2.1) for raising the pressure of the gas to an adequate level, a second gas supply line (3) which connects liquid phase section (4.2) of the cargo tank (4) and the gas main supply line (7) and which is provided with at least a pump (3.1) for raising the pressure of the liquid gas and for pumping it forward. The second gas supply line (3) is provided with a gas reservoir (3.2) having an ullage space section (3.3) and liquid phase section (3.7), which reservoir (3.2) is connected to the liquid phase section (4.2) of the cargo tank by a first duct section (3.1) of the second gas supply line (3) and to the gas main supply line (7) by a second duct section (3.4) of the second gas supply line (3). Invention relates also to corresponding method.

WO 2005/058684 A1